

Tennessee Department of Labor and Workforce Development
Annual Performance Report to the Employment and Training Administration
July 1, 2014 –June 30, 2015
August 2015

The three deliverables for this year's Workforce Information Grant include the following:

- (1) Populating, maintaining, and updating the Workforce Information Database (WID):
- (2) Creating and publicizing the state and local industry and employment projections;
- And (3) Producing a statewide economic analysis report.

- (1) Populating, Maintaining, and Updating the WID:

Deliverable 1. Populate WID with state and local data

Data files populated and updated in Program Year 2014-15 including core tables

Regular updates of the Workforce Information Database (WID) were done for these files, most of which contain state and local data:

Core Data Tables populated and updated regularly	Other Data Tables populated and updated regularly
CES EMPDB INDUSTRY LABFORCE OESWAGE INDPRJ OCCPRJ	ANALYSIS BLDING PROGCOMP PROGRAMS SCHOOLS STINDPRJ STOCCPRJ SUPPLY INCOME POPULATN

Core Data Tables: CES and Labor Force data are updated monthly. **EMPDB** is updated every six months by GeoSol, which now hosts jobs4tn.gov. **INDUSTRY** is now

updated through the fourth quarter of 2014, and documentation is available for that process. **INDPRJ and OCCPRJ** are now updated with the state and LWIA 2012 and 2022 projections. **OESWAGE** has been updated with current data.

Non-Core Tables: The process for updating **BLDING** permits has been documented, and they are available through June 2015. **STINDPRJ and STOCCPRJ** have been updated with 2014-2016 projections. The **INCOME AND POPULATN** tables are updated to 2014.

This year a major effort to update the processing of **SCHOOLS, PROGRAMS, PROGCOMP, AND ANALYSIS** was undertaken, with programs rewritten from Foxpro to Access. Training programs with CIP 2010 and occupations with SOC 2010 codes have been aligned in approximately 210 clusters/programs of study to create **ANALYSIS** files. Criteria developed with workforce partners identify whether occupations in the clusters are in demand. The new **ANALYSIS** display in jobs4tn.gov has a statement as to whether the occupations in the cluster are expected to be in demand with employers, and lists occupational employment, expected annual average openings, growth rates, median salary, and usual educational requirements; also listed are all related training programs by CIP codes and number of completers by degree level. For occupational clusters with educational requirements less than a bachelor's degree, data are presented by LWIA. If program placement rates are available, they are also displayed.

The Occupational Trends in Tennessee Employment Report (OTTER) Excel system was rewritten and updated in December, 2014. When the new version of OTTER is released in 2015, the data on supply (program completers) and demand (annual average openings) will be made available to LMI customers by distributing the OTTER Excel system directly, or through reports via fax or emailed .pdf files.

All the license files – **LICENSE, LICAUTH, LICHIST, and LICXOCC** have been updated to 2015. This was a major project that involved changing all the license identification numbers due to changes in the WID structure; reviewing all the license

titles, definitions, and agency locations; developing new agency contacts; and adding new licenses and agencies due to constantly changing regulatory law. The data has been emailed to the national crosswalk center.

UICLAIMS data by occupation and industry, available monthly, has been added to the WID by month for 2014.

The VOS/LMI jobs4tn.gov website has been updated to WID 2.5, Version 15.2, displaying the updated data. The supply and demand data was used in the legislative report “Academic Supply and Occupational Demand” in January, 2015.

(2) State and Local Industry and Employment Projections

Short-term industry and occupational projections were completed by February 28, 2015. They were uploaded to jobs4tn.gov and to the Projections Central website. An analysis of highlights of the projections is located on the redesigned TDLWD website

http://www.tn.gov/assets/entities/labor/attachments/2014-2016_SHORT-TERM_PROJECTIONS_REPORT.pdf

and also included in the Statewide Economic Analysis Report.

The Tennessee projections analyst left to work in another department in February, so an important activity was to train our new statistical analyst on the projections process. This took place while the short-term and long-term projections were being completed. Long-term projections for industries and occupations for 2012 to 2022 were finalized in the spring of 2015. Upon completion, work began on production of 13 “Hot Careers to 2022” publications. These were completed and are now posted on the TDLWD website.

<http://www.tn.gov/workforce/topic/occupations-in-demand>

To be included in the Hot Careers publications, occupations must meet the following criteria:

1. require more than short-term on-the-job training
2. are expected to have positive job growth
3. are expected to be in demand with employers
4. are forecast to have at least 10 annual average job openings in the area.

Characteristics that are important for job success are also displayed. The publications are used at job fairs and other public events to inform job seekers about jobs likely to be in demand with employers.

Another publication using long- term LWIA projections, OES wage data, OES staffing patterns, and real-time LMI from jobs4tn.gov jobs listings is "*Occupations with Bright Outlooks in Tennessee's Job Markets* (attached)." The real-time LMI includes job listings and candidates by county, and required tools and technologies, required education, and career ladder opportunities from jobs listings for 20 shortage occupations in Tennessee. With the Tennessee Promise program, thousands more students will have free access to community college this fall. The publication is targeted to students considering career options in Tennessee and their counselors. It is currently being reviewed by an administrator at the Tennessee Board of Regents and will be posted on the jobs4tn.gov website after review.

(3) Statewide Economic Analysis Report:

The publication "*Tennessee's Economy: An Overview*" (attached) highlighted employment and labor force trends through 2014. The report contained three major sections: industry, labor force, and occupational data analysis. The industry section analyzed trends in statewide and MSA employment over the year, the prior five years, and compared to 1990. Notably, in the private sector, manufacturing employment, at 13.6 percent in 2014, was half as large as it was in 1990, when it comprised 27.1 percent of the total. Sectors which have increased employment include leisure and hospitality, professional and business services, and education and health services.

Other industry data included QCEW data on the number of employers by county and their average wages, short term industry projections, and TOSHA data on industry-related illnesses and injuries. The labor force section summarized population and income growth trends, labor force participation rates, and unemployment trends. The occupational data section included an analysis of state median wages compared with wages in metropolitan and balance of state areas, and a comparison of major occupational group wages by ownership code. Trends in illnesses and injuries by major occupational group were also included.

Future reports will be focused on more in-depth analysis of the many workforce challenges that Tennessee faces as its economy expands.

Collaborations

Significant collaboration occurred this year with higher education institutions in Tennessee, revolving around the **Tennessee Workforce Data Quality Initiative** and

the “*Academic Supply and Occupational Demand*” report mandated by the Tennessee legislature.

We continue participation in the P-20 longitudinal education and employment database project. P-20 is a data warehouse for educational and workforce longitudinal study being carried out as a collaborative project between the University of Tennessee and other higher education participants, and the Tennessee Departments of Education and Labor and Workforce Development. The Tennessee Department of Labor and Workforce Development received some funding for this ongoing data provision. Confidentiality and other agreements have been signed and will continue to be reviewed as the project moves along. For files regularly submitted to the University of Tennessee for the p-20 project, see below.

Partners this year sought to enrich the database with files from additional agency collaborators, and to identify additional research questions. Staff from the Department of Labor and Workforce Development and the Center for Business and Economic Research of the University of Tennessee at Knoxville (CBER) collaborated on the writing a grant, submitted by the Department, for \$1.2 million to enhance the Tennessee Longitudinal Data System (TLDS). The grant was awarded for \$1.08 million, with most of the funding to be used by CBER to enhance and maintain the database and do and facilitate workforce effectiveness research. The grant application (page 1) describes the collaboration as follows:

With Race to the Top funding awarded in 2009, the state implemented a comprehensive longitudinal data system resulting in strong partnerships between TDLWD, TDOE, the Tennessee Higher Education Commission (THEC), and the Center for Business and Economic Research (CBER) at The University of Tennessee, Knoxville (UT). TLDS partnerships have recently expanded to include the Department of Children’s Services (DCS) and the Department of Intellectual and Developmental Disabilities (DIDD). TLDS links individual level data starting with entry into PreK through high school, college, and over the individual’s employment history. The TLDS project team is currently working to integrate program service data from DCS (for children in-custody) and DIDD (for individuals with special needs) to provide a more complete view of an individual. The integration, sharing, and use of data are done with oversight of the TLDS Steering Committee guided by the data sharing agreement in place. CBER provides the management, security and procedural oversight for sharing and use of data.

Objectives of the expanded TSDS include (1) updating and expanding data sources integrated in the TSDS, especially as data systems in TDLWD are changed in the next two years; (2) evaluating the effectiveness of workforce development programs such as the governor’s Drive to 55 and new WOIA programs; (3) adding relevant agency data from the Department of Human Services and Economic and Community Development. Goals relating to workforce development include research on the effectiveness of

programs to reduce the incidence of unemployment, the frequency and length of UI claims, and to increase job tenure. Also, data dashboards will be set up to increase data to enhance customer choice.

Academic Supply and Occupational Demand in Tennessee

By law, an annual report on academic supply and occupational demand must be submitted to the legislature in January by the Tennessee Higher Education Commission (THEC). The report, subtitled “Workforce Needs and Degree Production,” is to contain information on areas of occupational demand and skill shortages in the state, with information supplied by the Department of Labor and Workforce Development. This year’s report identified 25 programs of study, including occupations, median wages, and educational requirements, with shortages of trained personnel in the state, as well as 10 areas with surplus supply.

Internal consulting with the Department of Labor and Workforce Development

LMI staff have been collaborating on the new departmental VOS/UI/LMI website, with extensive participation in specifications, design, testing, and training. The modules containing the current and future VOS/UI/LMI functionality are within www.jobs4tn.gov.

The entire unemployment system is being reprogrammed into a web-based database application, which will greatly improve the accuracy of the data, improve service, and allow the LMI unit improved access to data files and reports on claimant and re-employment activity. LMI data are contextually imbedded in various modules of the system to allow claimants and applicants to access the data when they are filling out resumes.

The departmental site, <http://www.tn.gov/workforce>, directly links to numerous locations in www.jobs4tn.gov. This spring the departmental site was redone and the LMI unit involved in identifying and testing links leading to LMI data, so job seekers would have better access to information like jobs in demand, and employers better access to projections data and other LMI data.

The LMI unit also partnered with the Grants and Special Projects unit to redo the Unemployment Insurance Profiling model for RESA to identify the individuals most likely to exhaust their benefits. This project was accomplished using logistic regression and was completed in June, 2015.

Presentations and Training

Training conducted this year included presentations on non-covered employment development for the short-term and long-term industry and occupational projections and step-ahead projections estimation at the PMP summit in Portland, Oregon on June 10,

2015 and a presentation at Glenclyff High School in Nashville on jobs4tn.gov to their college readiness class. This high school is very ethnically diverse, with large numbers of Spanish-speaking students attending, among others.

Customer Feedback

The LMI section is reprogramming a previously-developed user database to keep track of requests and requestors. Future plans include the ability to enter data on training classes and to extract mass email lists. Besides emailing the monthly newsletter and the unemployment releases monthly, email lists have been developed of recent data requestors to notify them of new publications and solicit feedback.

Tennessee LMI is also participating in the Projections Managing Partnership (PMP) Users Subcommittee, which is soliciting input from projections users and will provide recommendations to the PMP in 2016.

Attachment A

Collaboration: The University of Tennessee P-20 Project

P-20 is a data warehouse for educational and workforce longitudinal study being carried out as a collaborative project between the University of Tennessee and other higher education participants, and the Tennessee Departments of Education and Labor and Workforce Development. The Tennessee Department of Labor and Workforce Development received a grant for this ongoing data provision. Confidentiality and other agreements have been signed and will continue to be reviewed as the project moves along.

Updated data files listed below are submitted regularly to the University of Tennessee P-20 Project.

Files Updated and Submitted Regularly

Oct 2012 quarter

Added CES

Jan – Mar 2013 quarter

Added: INDTYPE

From July 2012 forward

INDPRJ

INDUSTRY

LABFORCE

LICAUTH

LICHIST
OCCPRJ
OESWAGE
POPULATN
STINDPRJ
STOCCPRJ
AREATYPE
BENCHMARK
CIPCODE
CLSXPJ
CLSXSUPL
CLUSCODE
COMPLTYP
GEOG
INDDIR
INDTYPES
INSTOWN
INSTTYPE
LENTYPE
LICENSE
LICNUMTY
LICXOCC
MATXNAIC
MATXSOC
NAICCODE
NAICSECT
NAICSLVL
OCCCODES
OCCDIR
OCCTYPES
OOHTRNTM
OWNERSHP
PERIOD
PERIODID
PERIODTY
POPSOURC
PROGCOMP
PROGRAMS
RATETYPE
SALES
SALESTYP
SCHOOLS
SICCODE
SOCCODE
SUBGEOG
SUPPLY
WGSOURCE
UNITTYPE

GROWCODE
SICDIV
BLDING

